

Monday, July 10, 2023

IMPERIAL CONGRESS HALL

08.00 - 11.00

Registration desk

Monday 10

MINOS MAIN HALL

Plenary		MAIN CONFERENCE	Monday 10
11.45 - 12.00	Kaniadakis G.	<i>Welcome Addresses & Opening Ceremony</i>	Chair Argyrakis P.
12.00 - 12.10	Metzler R.	<i>European Physical Society</i>	
12.10 - 12.20	Major of Chania	<i>Chania municipality</i>	
12.20 - 12.30	Kaniadakis G.	<i>Sigmaphi Prizes Cerimony</i>	
12.30 - 13.00	Group Photo		
13.00 - 14.30	Break		

MINOS MAIN HALL

Area A	MAIN CONFERENCE		Monday 10
14.30 - 15.00	Motter A.	<i>Converse symmetry breaking in network dynamics</i>	Chair Saad D.
15.00 - 15.30	Field T.	<i>Dynamical Theory of Spin Noise and Relaxation - Beyond the Lorentzian</i>	
15.30 - 15.50	Kantor Y.	<i>Correlated percolation of sites not removed by a random walker in $2 \leq d \leq 6$ dim....</i>	
15.50 - 16.10	Łeppek M.	<i>Coagulating systems revisited with combinatorial approach - possibilities and....</i>	
16.10 - 16.30	Corberi F.	<i>Ordering kinetics in systems with long-range interactions</i>	
16.30 - 16.50	Dubkov A.	<i>Probability analysis of nonlinear dynamical systems driven by Ornstein-....</i>	
16.50 - 17.10	Randon-furling J.	<i>First-passage time below the diagonal for the Brownian maximum</i>	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Kosztolowicz T.	<i>Application of g-subdiffusion equations with the fractional Caputo time ...</i>	Chair Field T.
18.00 - 18.30	Sollich P.	<i>Exponential increase of transition rates in metastable systems driven by</i>	
18.30 - 18.50	Um J.	<i>Coherence-enhanced quantum-dot heat engine</i>	
18.50 - 19.10	Yuste S.B.	<i>Diffusion of an intruder in a molecular/granular gas as a random walk</i>	

ARIADNE HALL

Area C	MAIN CONFERENCE		Monday 10
15.00 - 15.30	Boccaletti S.	<i>The transition to synchronization of networked systems</i>	Chair Modanese G.
15.30 - 15.50	Deroulers C.	<i>Surprising spatial profiles in steady flows of living cells which polarize to move</i>	
15.50 - 16.10	Gallo A.	<i>Strong, weak or no balance? Testing structural hypotheses against real networks</i>	
16.10 - 16.30	Kim G.	<i>Tradeoff of generalization error in unsupervised learning</i>	
16.30 - 16.50	Wilinski M.	<i>Network reconstruction from noisy and incomplete spreading dynamics</i>	
16.50 - 17.10	Malarz K.	<i>Ranking sequences of continents and countries in affiliations of scientific papers ...</i>	
17.10 - 17.30	Coffee break		
17.30 - 18.00	Modanese G.	<i>Rewiring of scale-free networks vs. degree correlation properties</i>	Chair Tadic B.
18.00 - 18.20	Neda Z.	<i>Gintropic limits and scaling for the Hirsch index</i>	
18.20 - 18.40	Ochab J.	<i>Fractal and multifractal organisation of neuroimaging signals in cognitive tasks and...</i>	
18.40 - 19.00	Xenikos D.	<i>Spatial effects on epidemics diffusion: Network topological characteristics leading</i>	
19.00 - 19.20	Tutajewski M.	<i>Classification of short-term memory tasks in ROI-based fMRI data</i>	

PASIPHAE HALL

Workshop 1		Quantum Physics and Machine Learning	Monday 10
15.00 - 15.20	Caruso F.	<i>Quantum machine learning: overview and perspectives</i>	Chair
15.20 - 15.40	Barkoutsos P.	<i>Quantum scientific machine learning for multiphysics simulations</i>	Nowak M.
15.40 - 16.00	Peano V.	<i>How can a machine automatically discover better feedback strategies for quantum devices?</i>	
16.00 - 16.20	Pittorino F.	<i>Loss landscapes of neural networks through the lens of flat regions and symmetries</i>	
16.20 - 16.40	Ellinas D.	<i>Physics-informed neural network (PINN) for solving quantum master equation....</i>	
16.40 - 17.00	Tsironis G.	<i>Application of machine learning methods in the targeted energy transfer nonlinear model</i>	
17.00 - 17.30	Coffee break		
17.30 - 17.50	Marino R.	<i>Phase transitions in mini-batch size for sparse and dense deep neural networks</i>	Chair
17.50 - 18.10	Nowak M.	<i>From multiplicative matrix-valued diffusion to isometry of residual networks in....</i>	Caruso F.
18.10 - 18.30	Fuchizaki K.	<i>Can memory hysteresis in a neural network judge the continuity/discontinuity</i>	
18.30 - 18.50	Giampaolo S.M.	<i>Testing the neural network approach in the presence of topological frustration</i>	

THESEUS HALL

Special Session 1		Spin glass theory and far beyond	Monday 10
15.00 - 15.20	Lucibello C.	<i>The exponential capacity of modern associative memories</i>	Chair
15.20 - 15.40	Boettcher S.	<i>Finite-size corrections in spin glasses and combinatorial optimization problems</i>	Leuzzi L.
15.40 - 16.00	Malatesta E.M.	<i>Structure and connectivity of solutions in non-convex continuous optimization</i>	
16.00 - 16.20	Contucci P.	<i>Disordered systems beyond the permutation symmetry paradigm</i>	
16.20 - 16.40	Mingione E.	<i>On a multiscale mean-field spin glass</i>	
17.00 - 17.30	Coffee break		
17.30 - 17.50	Leuzzi L.	<i>Spin-glass models for random lasers: how to expose the inner structure of the....</i>	Chair
17.50 - 18.10	Niedda J.	<i>Glass and pseudo-localization transitions in the Mode-Locked p-spin model for</i>	Martin-Mayor V.
18.10 - 18.30	Perrupato G.	<i>Theory of kinetically-constrained-models dynamics</i>	
18.30 - 18.50	Ricci-Tersenghi F.	<i>Surprises from the out-of-equilibrium dynamics of mean-field spin glasses</i>	
18.50 - 19.10	Bernaschi M.	<i>Large scale simulations of the Ising quantum spin glass transition</i>	
19.10 - 19.30	Nechaev S.	<i>Devil's staircase and modular invariance: from spectral statistics of random ...</i>	
19.30 - 19.50	Prykarpatski A.	<i>On integrable parametric generalization of the Kardar-Parisi-Zhang equation....</i>	

AMALTHEA HALL

Workshop 8		Thermalization of Nonintegrable Many-Body Systems	Monday 10
14.30 - 14.55	Campbell D.	<i>The metastable state of the Fermi-Pasta-Ulam-Tsingou (FPUT) problem</i>	Chair
14.55 - 15.20	Paleari S.	<i>Approximate integral of motion for macroscopic lattice systems</i>	Flach S.
15.20 - 15.45	Shimizu A.	<i>A key observable that guarantees linear thermalization of all macroscopic</i>	
15.45 - 16.10	Lepri S.	<i>Thermalization of isolated harmonic networks under conservative noise</i>	
16.10 - 16.30	Rumpf B.	<i>Cold discrete breathers</i>	
16.30 - 16.50	Danieli C.	<i>Dynamical chaos in the integrable Toda chain induced by time discretization</i>	
16.50 - 17.10	Chiba Y.	<i>Timescale of linear thermalization</i>	
17.10 - 17.30	Coffee break		
17.30 - 17.50	Flach S.	<i>Thermalization universality classes for weakly nonintegrable many-body ...</i>	Chair
17.50 - 18.10	Lando G.	<i>Thermalization of weakly non-integrable Josephson junction networks</i>	Campbell D.
18.10 - 18.30	Makris K.	<i>Optical thermodynamics of nonlinear systems</i>	
18.30 - 18.50	Christodoulidi H.	<i>Energy localisation and dynamics of a mean-field model with non-linear dispersion</i>	
18.50 - 19.10	Many Manda B.	<i>Nonlinear topological edge states: From dynamic delocalization to thermalization</i>	

MINOTAUR HALL

Workshop 10	Non-Extensive Statistical Mechanics and Kappa Distributions		Monday 10
14.30 - 14.35		<i>Welcome / Introduction</i>	Chair
14.35 - 15.30	Tsallis C.	<i>Inanimate and living matter, Earth & outer space - Why are nonadditive....</i>	Summer D.
15.30 - 15.55	Zhdankin V.	<i>Generalized entropy production and nonthermal particle acceleration in</i>	
15.55 - 16.20	Ilić V.	<i>Statistical complexity of kappa distribution</i>	
16.20 - 16.45	Davis S.	<i>Temperature and its uncertainty in nonequilibrium steady state plasmas</i>	
16.45 - 17.10	Livadiotis G.	<i>Entropy defect in thermodynamics</i>	
17.10 - 17.30	Coffee break		
17.30 - 17.55	Summers D.	<i>Kappa distributions and power-law spectra in space plasmas</i>	Chair
17.55 - 18.20	Randol B.	<i>Possible explanation for power law tails of the solar wind ion distribution function....</i>	Nicolaou G
18.20 - 18.45	Pierrard V.	<i>Regularized kappa distributions to model the solar wind electrons</i>	
18.45 - 19.10	Arbutina B.	<i>Kappa distribution as a description of spectrum of supra-thermal particles at</i>	
19.10 - 19.30	Davelaar J.	<i>The usage of kappa distributions in the context of accreting black hole modeling</i>	
19.30 - 19.50	Zharkova V.	<i>Pitch-angle distribution of accelerated electrons in 3D current sheets with</i>	
19.50 - 20.10	Shen C.	<i>Nonthermal broadening of IRIS FeXXI line caused by turbulent plasma flows in</i>	